

## **ABSTRACT OF THE DISCLOSURE**

Methods for applying electrical stimuli to optical micro-electro-mechanical system (MEMS) devices are disclosed. Electrical stimuli may be applied to one or more released current carrying elements mounted above a supporting substrate biased to minimize electrostatic force between the one or more current released current carrying elements and the supporting substrate. Additionally, the electrical stimuli bias minimizes electrical potential difference between the one or more released current carrying elements and one or more non-current carrying elements mounted above the supporting substrate that come in contact or close proximity during operation of the one or more released current carrying elements.